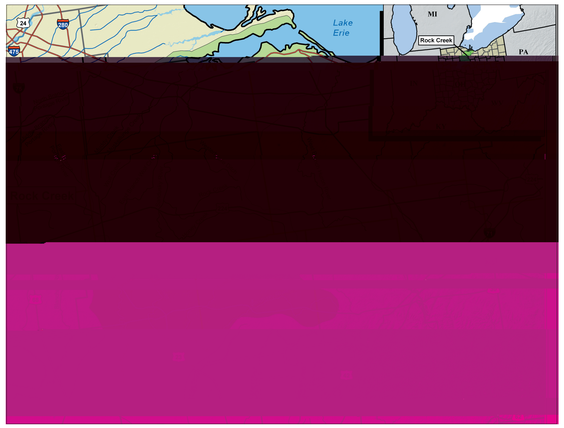
United States Department of Agriculture

Conservation Effects Assessment Project (CEAP)

Rock Creek Watershed, Ohio: 2004-2007

A CSREES* Competitive Grant Watershed, one of 24 CEAP watershed projects.



CEAP Assessment

Evaluate agricultural land use and water quality trends; model alternative management scenarios to optimize water quality.

Watershed Description

- 22,000 acres
- 82% crop land, 16% forest
- Listed by Ohio EPA as impaired for aquatic life.

Issues: Sediment and nutrient losses from an agricultural watershed, suburban development, fish and aquatic habitat, wildlife habitat.

*Cooperative State Research, Education, and Extension Service

Approach

Water sampling: Flow, sediment, phosphorus, nitrogen, ammonia, silica, sulfate, chloride, fluoride, pesticides, and metals

Watershed models: AnnAGNPS (Annualized Agricultural Nonpoint Source)

Assess practices: Placement and timing of conservation practices, optimal mix of practices, lag times in water quality responses.

Communicating Results

Project reports, professional meetings, one or more peer-reviewed papers in professional journals.

Collaborators

- Heidelberg College
- University of Toledo
- Ohio State University
- USDA, Natural Resources Conservation Service
- USDA, Farm Service Agency
- Seneca County Soil and Water Conservation District
- Local farmers and ranchers and stakeholders

Contacts

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Project: www.heidelberg.edu/WQL

NRCS State Conservationist
Terry Cosby

Native grasses and trees in a conservation buffer.

Leaving a few rows of unharvested corn or other grain near good wildlife cover adds to habitat for a number of species of wildlife.

Conservation tillage leaves at least 30 percent of the soil covered after planting with last year's crop residue. Residue adequately controls erosion by both wind and water on this soil type.

Timeline

2003
Initial funding

2004
August CEAP bibliographies

2005
May Wetlands peer review
July Wildlife literature review (program-based)
October Cropland literature reviews
Wildlife literature review (practice-based)
Wildlife Work Plan
November Wetlands Work Plan
December Draft findings—
Prairie Pothole region

2006
February Preliminary habitat quality models—
Prairie Potholes wetland region
March Preliminary National Assessment Report

2007
Fall National Assessment Final Report

2008
January CSREES Watershed final reports

www.nrcs.usda.gov/technical/nri/ceap/